

Application No.: 10/786,881  
Examiner S.N. Qazi

Docket No.: PAZ-222CN  
Group Art 1616

### **REMARKS**

Claims 1-26 and 38-48 were pending in the application. Claims 4, 39, and 45 have been cancelled. New claims 49-163 have been added. Claims 1, 5, 14, 16, 26, 38, 40-44, and 48 have been amended. Therefore, claims 1-3, 5-26, 38, 40-44 and 46-163 are currently pending. No new matter has been added.

Support for the amendment to claims 1 and 5 can be found, for example, at least in claim 4 as originally filed. Claims 14 and 26 were amended to each claim a single compound. Claims 16 and 48 were amended to correct the punctuation and grammar, respectively. Support for the amendment to claim 38 can be found, for example, at least in claim 39 as originally filed. Claims 40-44 has been amended to clarify the invention and to no longer depend on a cancelled base claim.

New claims 49-55 are directed to compounds previously pending in claim 5. New claims 56-82 are directed to compounds previously pending in claim 26. Support for new claims 83-126 can be found, for example, at least in claims 38-47 as originally pending. Support for new claims 127-163 can be found, for example, at least in claim 48 as originally pending.

Cancellation of the claims should in no way be construed as an acquiescence to any of the Examiner's rejections. The cancellation of the claims is being made solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in the present or another patent application. The cancellation of the claims is not related to any issues of patentability.

### ***Personal Interview***

Applicants would like to thank Examiner Qazi for discussing the application with Applicants' attorneys on May 14, 2007. The claims, as presented herein, were discussed.

### ***Co-Pending Applications***

Applicants gratefully acknowledge the Examiner's request regarding relevant copending applications. As discussed in the personal interview on May 14, 2007, a list of copending applications were cited in the Information Disclosure Statements, which were filed on March 11, 2005 and October 18, 2006.

### ***Rejection of Claims 1-7, 9, 10, 13-17 and 38-48 under 35 U.S.C. §102(b)***

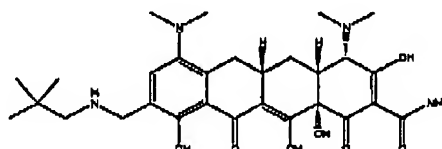
Claims 1-7, 9, 10, 13-17 and 38-48 are rejected under 35 U.S.C. §102(b) as being anticipated by Petersen *et al.* (Antimicrobial Agents and Chemotherapy, 1999, p. 738-744). Specifically, the

Application No.: 10/786,881  
Examiner S.N. Qazi

Docket No.: PAZ-222CN  
Group Art 1616

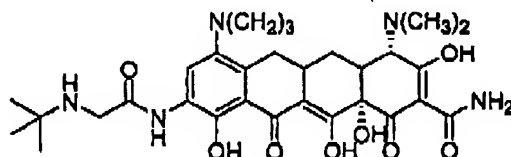
Examiner asserts that the compound in Figure 1 on page 739 of Petersen *et al.* has the same structure as the elected species.

Applicants respectfully traverse. Independent claim 1 is directed to tetracycline compounds of formula I in which substituent R<sup>9</sup> is an aminomethyl moiety. Further, Applicants respectfully submit that the species elected in the Response to the Restriction Requirement is:



in which the R<sup>9</sup> aminoalkyl moiety is *t*-butylmethylaminomethyl.

In contrast, Peterson describes a 9-*t*-butylglycylamino derivative of minocycline:



in which the R<sup>9</sup> substituent is *t*-butyl aminomethylcarbonylamino. Accordingly, Applicants respectfully submit that Peterson *et al.* does not provide any teaching or suggestion of substituted tetracyclines in which R<sup>9</sup> is an aminomethyl moiety. Applicants further submit that the compound of Figure 1 in Peterson *et al.* is not the elected species. Therefore, based at least the foregoing, Applicants respectfully request reconsideration and withdrawal of this rejection.

**Rejection of Claims 38 and 45-47 under 35 U.S.C. §112, first paragraph**

Claims 38 and 45-47 are rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. Specifically, the Examiner asserts that the phrase "tetracycline responsive state" in claim 38 "may include many unknown diseases" and that "[a]t the time the invention was made Applicants had no possession of such a treatment." Moreover, the Examiner asserts that a skilled artisan "would have to go through undue experimentation to make and use the invention." In addition, the Examiner asserts that the phrase "resistant to other tetracycline antibiotics" has no description" and would require undue experimentation.

Applicants respectfully traverse. However, to expedite prosecution, claim 45 has been cancelled, and therefore, this rejection is moot as it pertains to this claim. With regard to claim 38, Applicants' have amended the claim to remove the phrase "tetracycline responsive state."

Application No.: 10/786,881  
Examiner S.N. Qazi

Docket No.: PAZ-222CN  
Group Art 1616

Applicants have amended claim 38 to recite a "bacterial infection". Applicants submit that one of ordinary skill in the art would have understood what was meant by the term "bacterial infection" and no undue experimentation would have been required. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection.

***Provisional Rejection of Claims 1-26 and 38-48 Under the Doctrine of Obviousness Double Patenting***

Claims 1-26 and 38-48 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1-25, 36 and 37 of co-pending Application No. 11/069197. Specifically, the Examiner asserts that the "[t]etracycline compounds of the present invention overlaps with the claimed invention of copending application" and that "[i]n [the]claims of the present invention R<sup>9</sup> is aminoalkyl wherein co-pending application, R<sup>9</sup> can be various substituents."

Applicants respectfully traverse. However, in the interest of expediting prosecution, Applicants have amended the claims of co-pending application U.S.S.N. 11/069,197 to recite that R<sup>9</sup> is hydrogen. Claims 1-26 and 38-48 of the present application neither teach nor suggest compounds with R<sup>9</sup> as hydrogen. Therefore, Applicants respectfully request that this provisional rejection of the claims under the judicially created doctrine of obviousness type double patenting be withdrawn.

**SUMMARY**

It is respectfully submitted that this application is in condition for allowance. If there are any remaining issues or the Examiner believes that a telephone conference with Applicants' Attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned at (617) 227-7400.

Application No.: 10/786,881  
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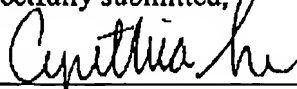
Docket No.: PAZ-222CN  
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**SUMMARY**

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Dated: May 22, 2007

Respectfully submitted,

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